

## Statement 5

September 29, 2016

Statement By: Kevin Mottus, California Brain Tumor Association

See Attachments 29, 30, 31, 32

I am strongly opposed to the FCC plan to rollout and auction 5G spectrum technology due to the non-thermal biological health effects created by radiofrequency/microwave radiation or electromagnetic fields (EMF) emitted by wireless transmitters. These documented effects are not recognized and not protected by our current FCC safety standards.

In California, Dr. De-Kun Li MD, PhD, MPH at Kaiser Permanente has stated publicly that wireless radiofrequency safety standards are inadequate to protect health, “Many studies of power frequencies reported associations with childhood leukemia, miscarriage, poor semen quality, autoimmune diseases at a level much lower than those generating thermal damage as used by FCC.”(See Attachment 29 for letter). He also acknowledges that there are some people that develop neurological symptoms when exposed to wireless microwave radiation and these people should be protected from programs such as 5G.

The California Medical Association passed a resolution on December 7, 2014 stating clearly that our current safety standards regarding wireless radiofrequency radiation exposures are not adequate to protect public health and need to be revised and take into account non-thermal biological effects in addition to the thermal effects they currently protect against. In this resolution they clearly acknowledge that “... peer reviewed research has demonstrated adverse biological effects of wireless EMF including single and double stranded DNA breaks, creation of reactive oxygen species, immune dysfunction, cognitive processing effects, stress protein synthesis in the brain, altered brain development, sleep and memory disturbances, ADHD, abnormal behavior, sperm dysfunction, and brain tumors...” (See Attachment 30 for resolution). They also released a bulletin specifically about the dangers of WiFi in schools and recommended minimizing exposure and using wired cable connections to the Internet instead of wireless connections (See Attachment 31 for bulletin).

We need to abide by these MD recommendations and not proceed with a massive wireless program like 5G that increases the exposure of wireless microwave radiation for the entire country until we have adequate safety standards in place that take into account non-thermal biological effects and protect our resident’s health especially children. These safety standards should also accommodate eletrohypersensitive individuals so we are not creating more eletrohypersensitivity amongst our citizens. We should pay particular attention to this state medical association recommendation given that the federal agency, the FCC that regulates these exposures is clearly a captured agency with a conflict of interest given that they are mandated to expand this technology and lack the qualified personnel to take into account the effects on public health.

The U.S.'s current plan to install 5G ignores this trend of acknowledging microwave radiation health effects and protecting special populations such as children, pregnant women, the elderly and people with medical conditions. These special populations will be directly affected by 5G and are explicitly not accounted for by the FCC safety standard. See Attachment 32, EPA letter stating that these special populations are not covered.

I am strongly opposed to the FCC plan to rollout and auction 5G spectrum technology due to the non-thermal biological health effects created by radiofrequency/microwave radiation or electromagnetic fields (EMF) emitted by wireless transmitters. These documented effects are not recognized and not protected by our current FCC safety standards. MD and PhD experts, in the field of wireless microwave radiation health effects, warn us of the serious harm that microwave technology especially 5G along with its required deployment of multiple transmitters, will cause. We ask that you abort your plan to auction 5G spectrum and immediately halt the rollout of 5G technology testing. We need to immediately institute safety standards that take into account non-thermal biological health effects. The research attached and cited shows that, at the power levels required for this technology to operate reliably over the project's large areas, the radiofrequency/microwave radiation will have significant biological health effects, especially on electrosensitive individuals and children (Cancer, Neurological effects, immune system disorders, reproductive harm and others). **We are asking that you focus instead on installing only fiber optic wired connection to the Internet along with individualized subsidies to help poor people pay for wired/cabled connection to the Internet. Fiber optic wired connections eliminates wireless microwave radiation transmissions thus eliminating wireless microwave radiation health effects. In addition we insist on instituting RF Exposure standards significantly lower than our current thermal standards as recommended and supported by the Bioinitiative Report ([Bioinitiative.org/conclusions](http://Bioinitiative.org/conclusions)) of 0.0003 microWatts per centimeter squared.**

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